# MSK-1541S
Industrial Sewing Machine

## Instruction Manual

RELIABLE

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## 1. Brief introduction

This machine adpots specific mechanism and timing feed, which can ensure smooth feeding, low noise, and beautiful stitches in apperance. It is constructed with slide link thread take-up, horizontal large rotating hook crochet,synchronic driving. This machien is widely used in the factory of suitcase, sofa, tarpaulins, tents, bag, etc.

## 2. Mian specifications

| | |
|---|---|
| Application | Heavy duty |
| Max.sewing speed | 2500 spm |
| Max.stitch length | 9mm |
| Needle bar stroke | 36mm |
| Needle | DP*17 (Nm125-Nm180) standard Nm160 (23#) |
| Lubrication | Auto-lubrication |
| Rotating hook | Horizontal rotating hook |
| Height of presser foot lift | 9mm by hand, 16mm by knee |
| Motor | 370W |

## 3. Installation (Fig.1)

1.Installation of the table connecting hook bracket and rubber cushion.

Fix the connecting hook bracket 1 and the rubber cushion 2 on the table by screw 3.

2.Installing the oil reservoir.

Set the oil reservoir 4 onto the table by six screws as shown in the Fig.

3.Install the knee control connector 5, knee control lift crank 9 and bent bar 7 according to the direction of the knee control lift bar shaft 8.

4.Adjust the direction of part 6,10, 11 by set screw.

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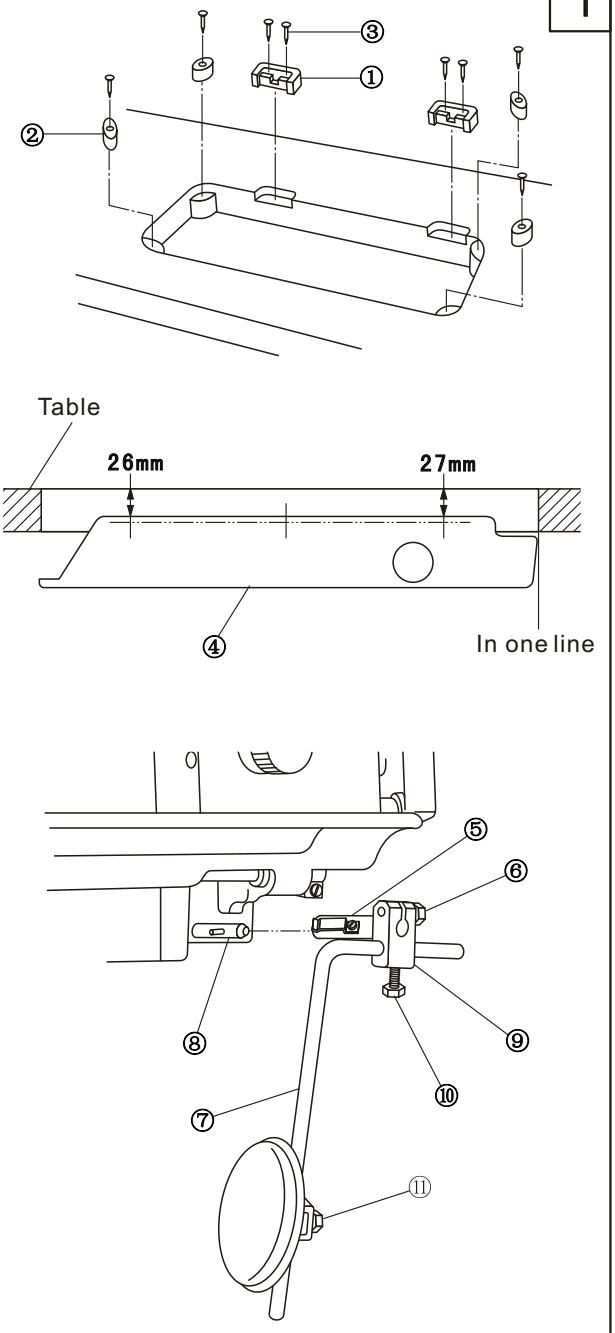

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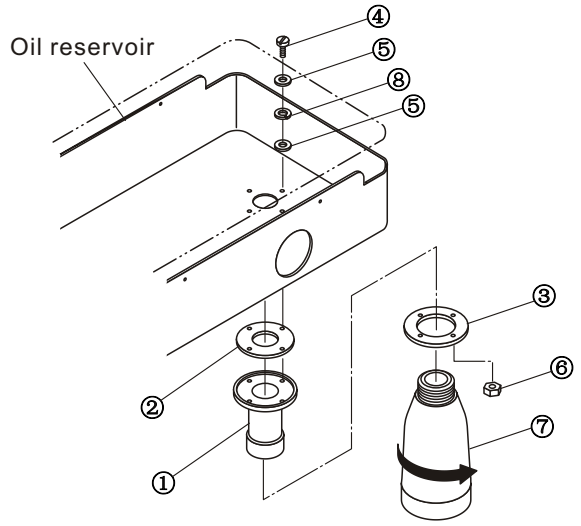


## 4. Installing the oil box (Fig2)

1.Install the bolt 1, oil seal 2 and spacer 3 onto the oil reservoir, and then put the cushion 5 and spacer 8 into the set screw 4, then set it by nut 6.

2.Tighten the oil pot 7 onto the bolt 1.

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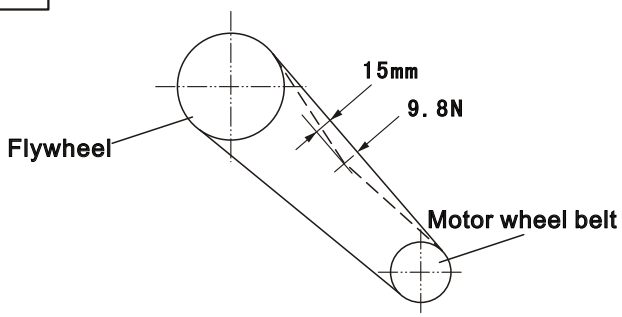


## 5. Adjusting the tension of the belt (Fig.3)

When adjusting the tension of the belt, please move the height of the motor, and press down the middle of the blet with the force of 9.8N. Then there will be a slack of 15mm.

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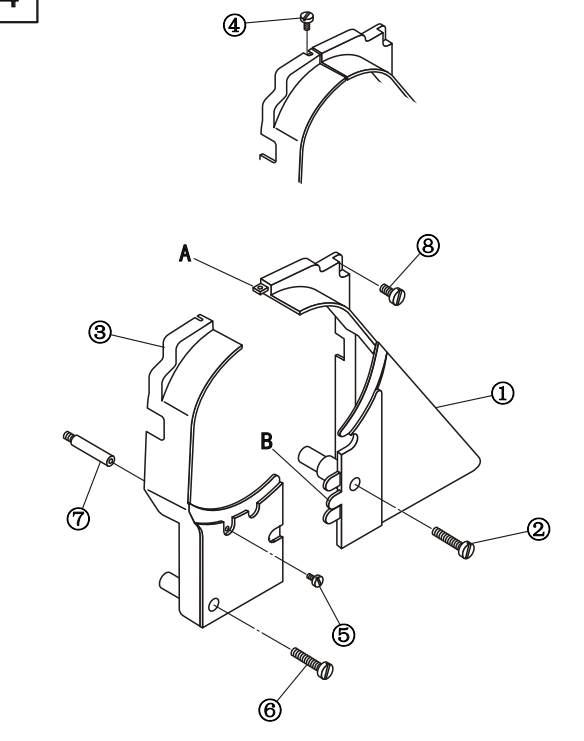


## 6. Installing the belt cover (Fig.4)

1.Tighten the column 7 into the screw hole on the machine head.

2.Install the belt cover (right) 1 on the machine head by set screw 2 and 8.

3.Connect the belt cover (left) 3 to the claw AB of the belt cover (right) 1.

4.Tighten the belt cover (left) 3 by set screws 4, 5 and 6.

**Note:** After installing the belt cover, make sure that the belt cover is not touch with the belt and flywheel.

## 7. Lubrication (Fig.5)

1.Face plate lubrication
a.Loosen the face plate screw;
b.Open the face plate 1 in the direction of the arrow;
c.Lubricate the place as the arrow shows every day;
d.Close the face plate;
e.Tighten the screw.

2.Machine body lubrication
a.Lubricate the place as the arrows indicate every day;
b.When run the machine for the first time or run it again after a long period of non-use, please oil the place as the arrows indicate. Besides, take down the top cover 2, then oil each felt and oil wick.

3.Rotating hook lubrication
a.Add the oil from oil hole 3 until it reaches the red line 4. Check it one time a day. If the the oil is under the red line 5, it should be refilled.
b.When adjusting the oil amount of the rotating hook, loosen the nut 7, then adjust it by adjusting screw 6. Turn it rightward, the amount of the oil can be increased; on the contrary, the amount can be reduced.

**Note:** Excess lubrication results in leaking.

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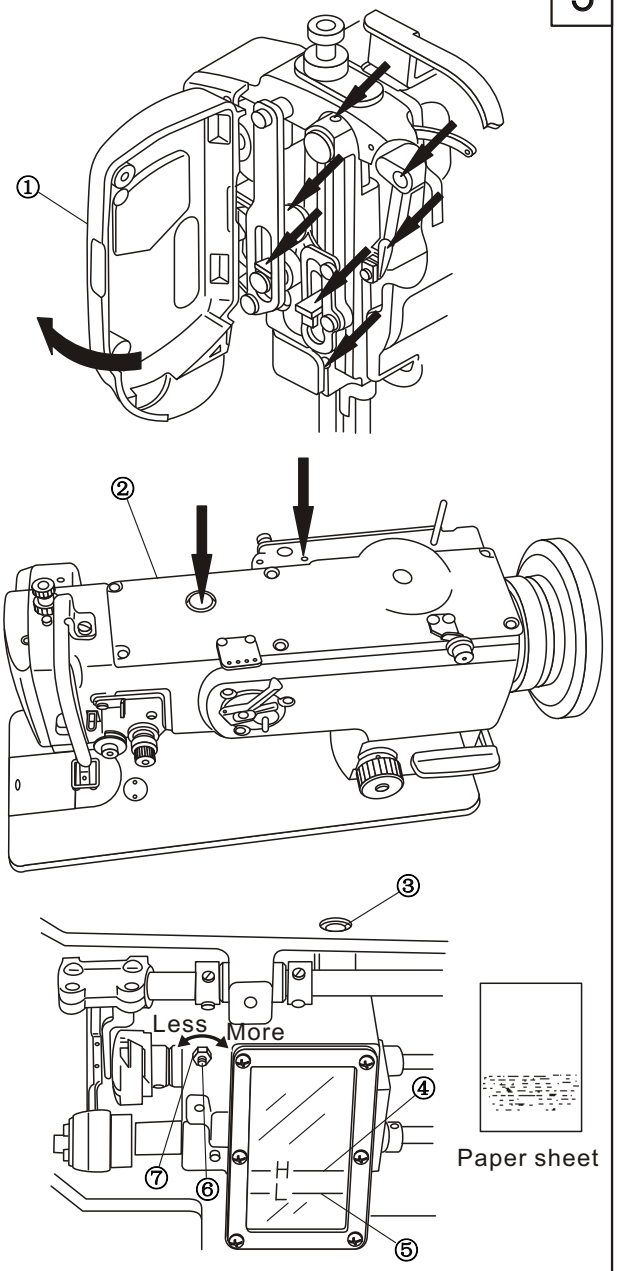


## 8. Installing the needle (Fig.6)

1.Turn the balance wheel to raise the needle bar to its highest position;
2.Loosen the set screw 2 and make the long groove of the needle 1 toward leftward;
3.Insert the needle into the bottom of the needle bar;
4.Tighten the set screw 2.

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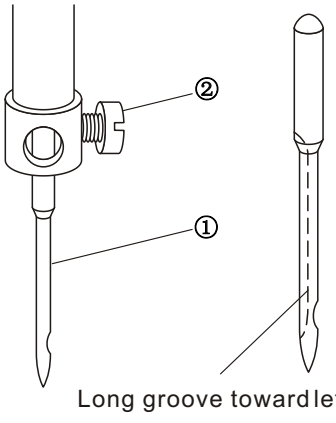

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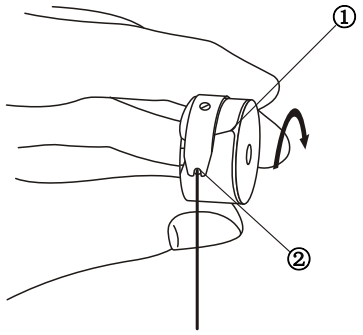


## 9. Threading the bobbin thread (Fig.7)

1.Insert the bobbin into the hook body, pass the thread through the thread hole 1, then pass down throgh the thread tension spring 2.

2.Draw the thread downward, then the bobbin will turn in the direction as the figure shows.

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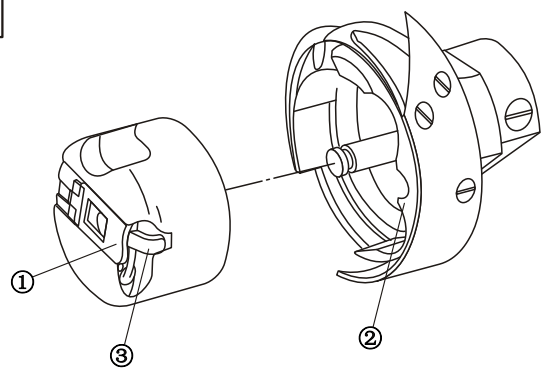


## 10. Installing the rotating hook body (Fig.8)

1.When taking out the rotating hook body, open the gib 1 and pull it off.

2.Align the rotating hook body with the rotating hook shaft and then insert it. Align the inside of the rotating hook 2 and the latch 3, then install the rotating hook body by pressing it until "crack" occurs.

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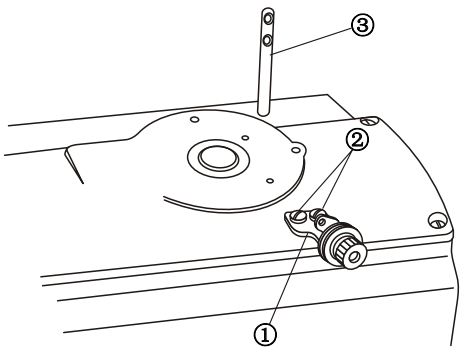


## 11. Installing the winding guider (Fig.9)

1.Set the winding guider 1 onto the top cover of the machine head by set screw 2.

2.Insert the bobbin thread guider 3 into the spool stand.

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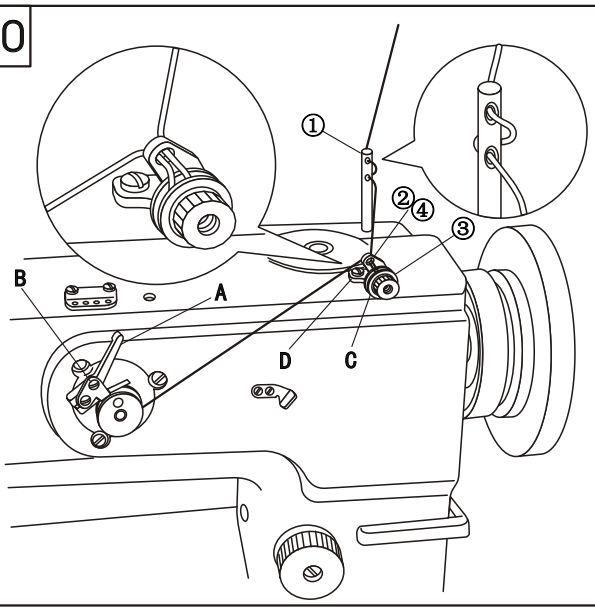



## 12. Winding the bobbin thread (Fig.10)

1.Thread in numerical order from 1 to 4, then wind the bobbin winder.

2.Press down the bar A.

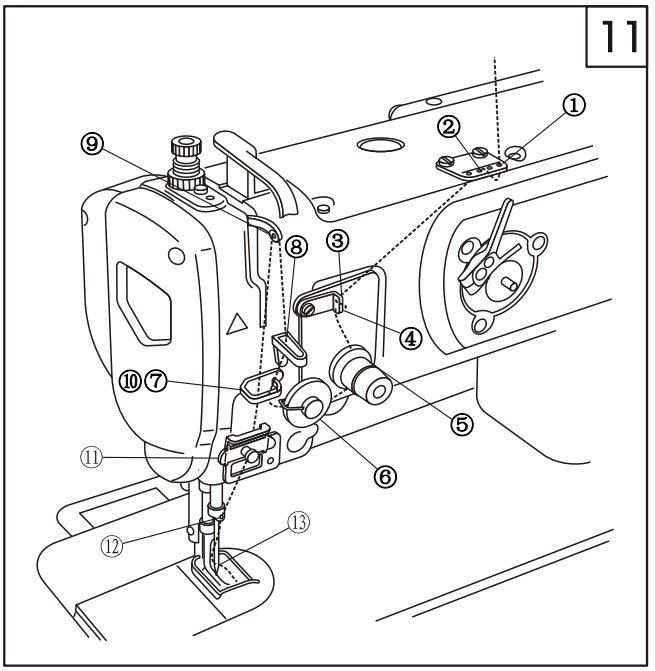
3.Loosen the set screw B and adjust the adjusting plate until the winding amount reaches the 80% of the ouside diameter.

4.When the winding is not smooth, move the winding guider C forward and backward, then set it by set screw D.

5.After winding, the winding bar A will separate and stop automatically.

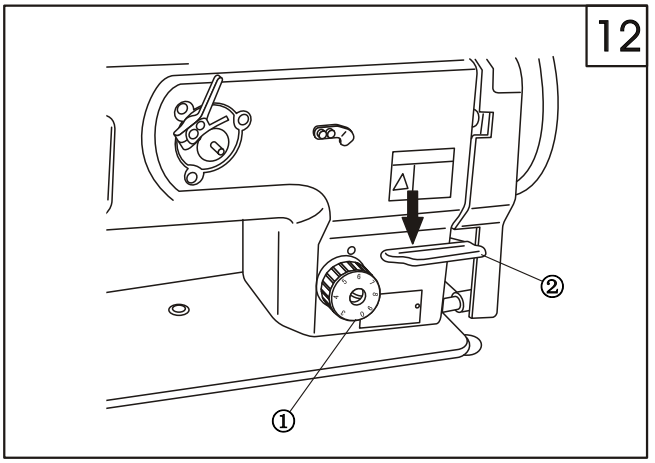
## 13. Threading (Fig11)

Thread in the order as shown in Fig.




## 14. Adjusting the stitch length (Fig.12)

Turn the stitch length dial plate 1 leftward and rightward to make the marker align with the required figure. Press down the reverse feed lever 2 to start backward sewing, and release it to start normal sewing.



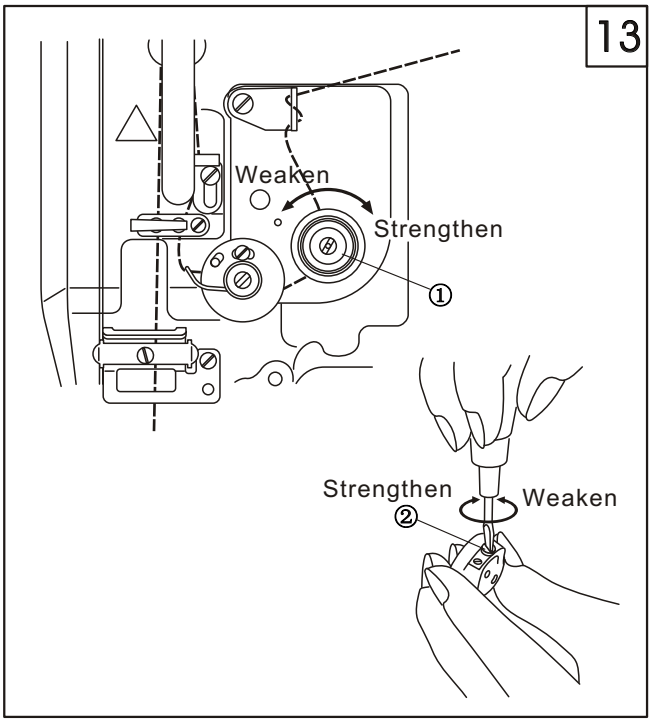

## 15. Adjusting the thread tension (Fig.13)

1.Adjusting the tension of the needle thread

Turn the nut 1 clockwise to increase the tension of the needle thread; on the contrary, to reduce the tension of the needle thread.

2.Adjusting the tension of the bobbin thread.

Turn the screw 2 clockwise to increase the tension of the bobbin thread, on the contrary, to reduce the tension of the bobbin thread.



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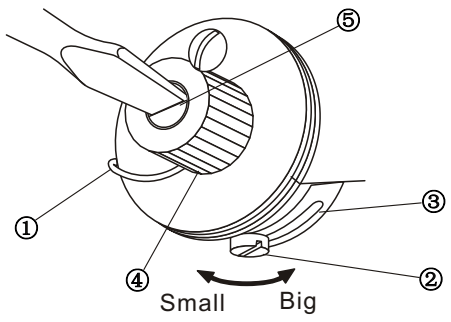


## 16. Adjusting the thread take-up spring (Fig.14)

1.Changing the swing range of the thread take-up spring

a.Loosen the set screw 2, move the stopper 3 leftward and rightward, then adjust the thread take-up spring 1.

b.Move the stopper rightward to increase the swing range of the thread take-up spring; on the contrary, to reduce the swing range of the thread take-up spring.

2.Changing the tension of the thread take-up spring

Loosen the nut 4, turn the spring shaft 5 counter-clockwise to increase the tension; turn it clockwise to reduce the tension.

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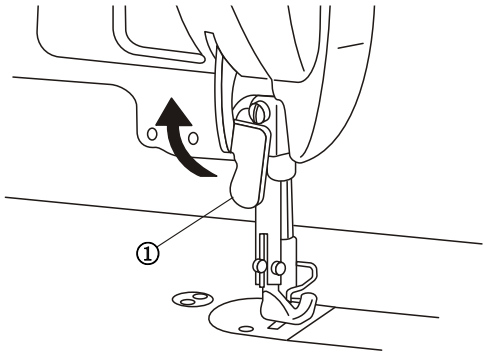


## 17. Presser foot lifter (Fig.15)

1.Stop the presser foot when it is lifted, lift the lifting bar 1 in the direction of the arrow. When the presser foot is lifted by 9mm, then stop it.

2.When lowering the presser foot, put down the lifting bar 1 to make the presser foot back to its original place.

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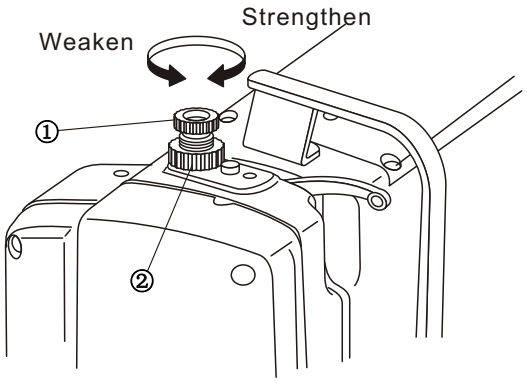


## 18. Adjusting the pressure of the presser foot (Fig.16)

Turn the adjusting screw 1 rightward to increase the pressure; turn it leftward to reduce the pressure. After adjustment, tighten the set nut 2.

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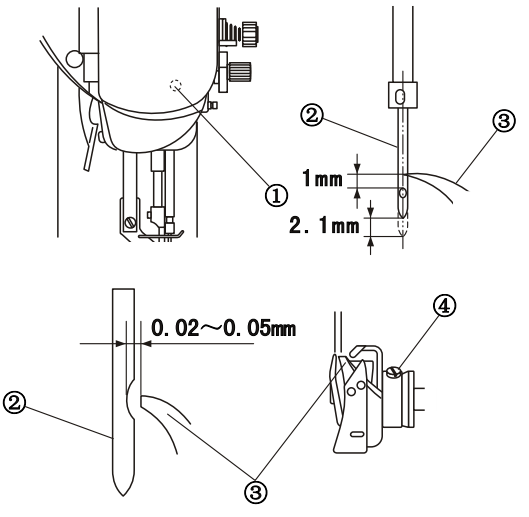


## 19. Relationship between needle and rotating hook (Fig.17)

1.Adjust the stitch length button to 0.

2.Turn the balance wheel to lift the needle bar from its lowest position by 2.1mm. loosen the screw 1, adjust the distance between up end of the eye of needle 2 and rotating hook point 3 to 1mm, tehn tighten it.

3.Turn the balance wheel to lift the needle bar from its lowest position by 2.1mm. Loosen the two set screws 4, turn the rotating hook, align the rotating hook 3 and the center of the needle 2, tehn tighten the two screws 4.

4.Loosen the two set screws 4, move the rotating hook leftward and rightward. Lign the rotating hook 3 and the center of the needle 2, and adjust the clearance between rotating hook and needle to 0.02-0.05mm, then tighten the screw.

## 20. Adjusting the alternating amount of presser foot (Fig.18)

When the presser foot is alternating increasingly, adjust it upward in the range of the long hole of the top feed crank; when the presser foot is alternating decreasingly, adjust it downward, then tighten the nut 2.

When the lifting amount of the presser and walking presser foot is different, first align the bottom of the presser foot and walking presser foot with the surface of the needle plate, then loosen the set screw 1.Turn the balance wheel to the front, tighten screw 2, then the lifting amount of the presser foot is more than that of the walking presser foot. Turn the balance wheel reversingly, then the lifting amoung of the walking presser foot is more than that of the presser foot.

Remove the right side of the window plate, then the top feed crank 3 can be observed.

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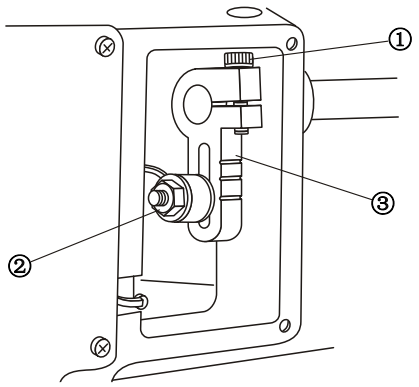



## 21. Sewing speed list

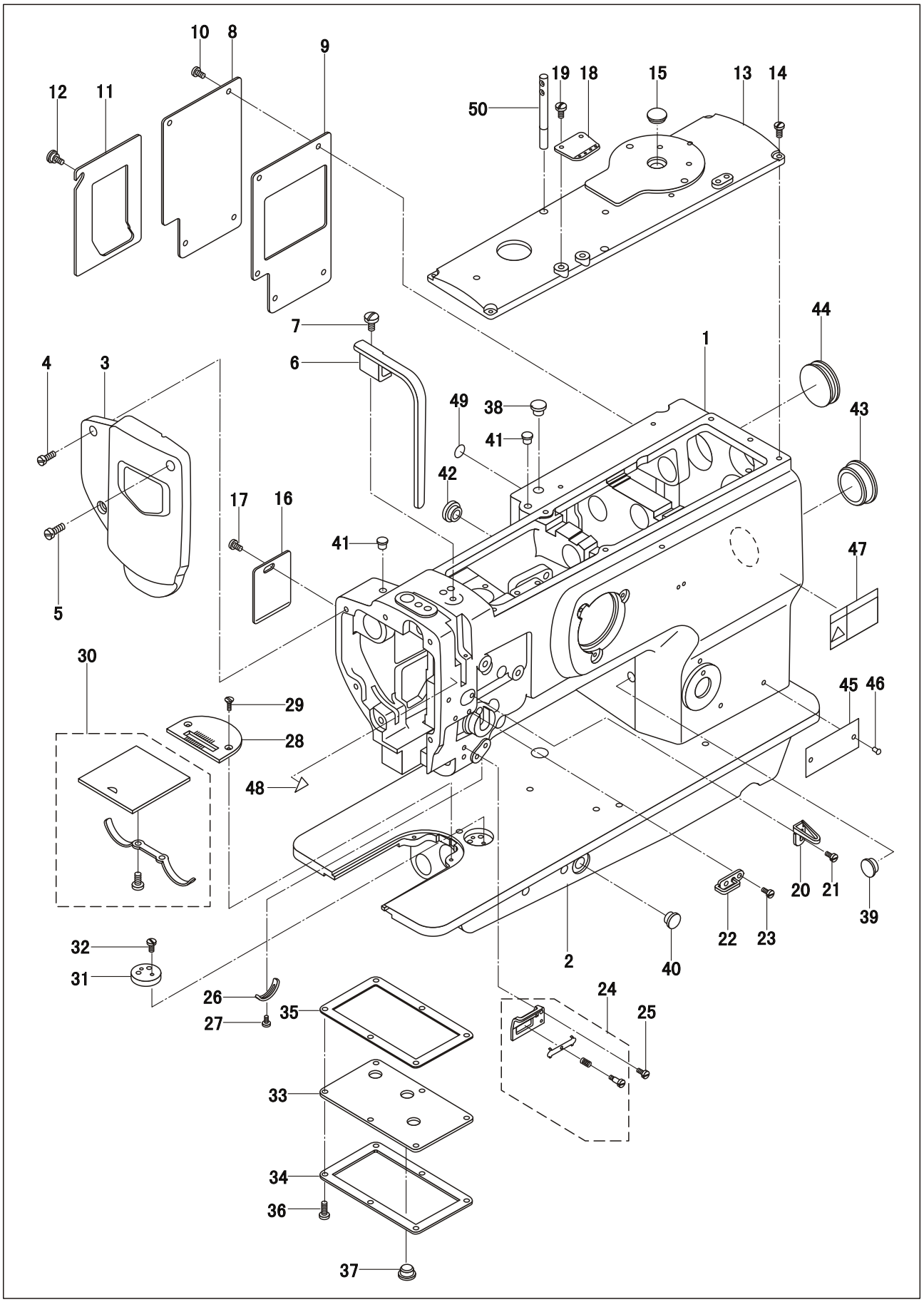
| Altenating amount | Stitch less than 6mm | Stitch between 6mm-9mm |
|---|---|---|
| Less than 3mm | 2500rpm | 2000rpm |
| Less than 3~4mm | 2000rpm | 2000rpm |
| Less than 4~6.5mm | 1600rpm | 1600rpm |

Set the sewing speed according to the different condition. Do not surpass the standard data.

## 22. Troubleshooting22. Troubleshooting

| Trouble | Possible cause | Remedy |
|---|---|---|
| 1. Thread breaking (2-3mm thread left on the cloth) | 1. Damage on the rotating hook set groove of thread way, needle point, rotating hook point and needle plate.<br>2. Too strong the needle thread tension<br>3. Collision between needle and rotating hook.<br>4. Too little the oil of the rotating hook<br>5. Too weak the needle thread tension.<br>6. Too strong the tension of the threaad take-up spring<br>7. Over fast or slow the timing between needle and rotating hook | 1. Polish the damaged part with sand paper; rasp the middle rotating hook set groove with file.<br>2. Weaken the needle thread tension.<br>3. Refer to (19.Relationship between needle and rotating hook.)<br>4. Adjust the oil amount (Refer to7. Lubrication)<br>5. Increase the needle thread tension.<br>6. Weaken the tension of the thread take-up spring.<br>7. Refer to (19. Relationship between needle and rotating hook) |
| 2. Puckering | 1. Over fast or slow the timing between needle and rotating hook.<br>2. Too weak the pressure of the presser foot.<br>3. The clearance between the up end of the needle and the rotating hook is not right.<br>4. Wrong needle. | 1. Refer to (19. Relationship between needle and rotating hook).<br>2. Tighten the pressr foot adjusting screw.<br>3. Refer to (19.Relationship between needle and rotating hook.)<br>4. Replace the needle. |
| 3. Loose stitch | 1. Without threading the bobbin thread under the spring of the thread tension of the rotating hook body.<br>2. Bad work on thread way.<br>3. No movement of bobbin.<br>4. Too weak the bobbin thread tension.<br>5. Too strong the bobbin thread tension.<br>6. Damage of the needle point. | 1. Refer to (9.Threading the bobbin thread)<br>2. Rast with sand paper or file.<br>3. Replace the bobbin or rotating hook<br>4. Increase the bobbin thread tension.<br>5. Reduce the bobbin thread tension.<br>6. Replace the needle. |

## 1. Arm and bed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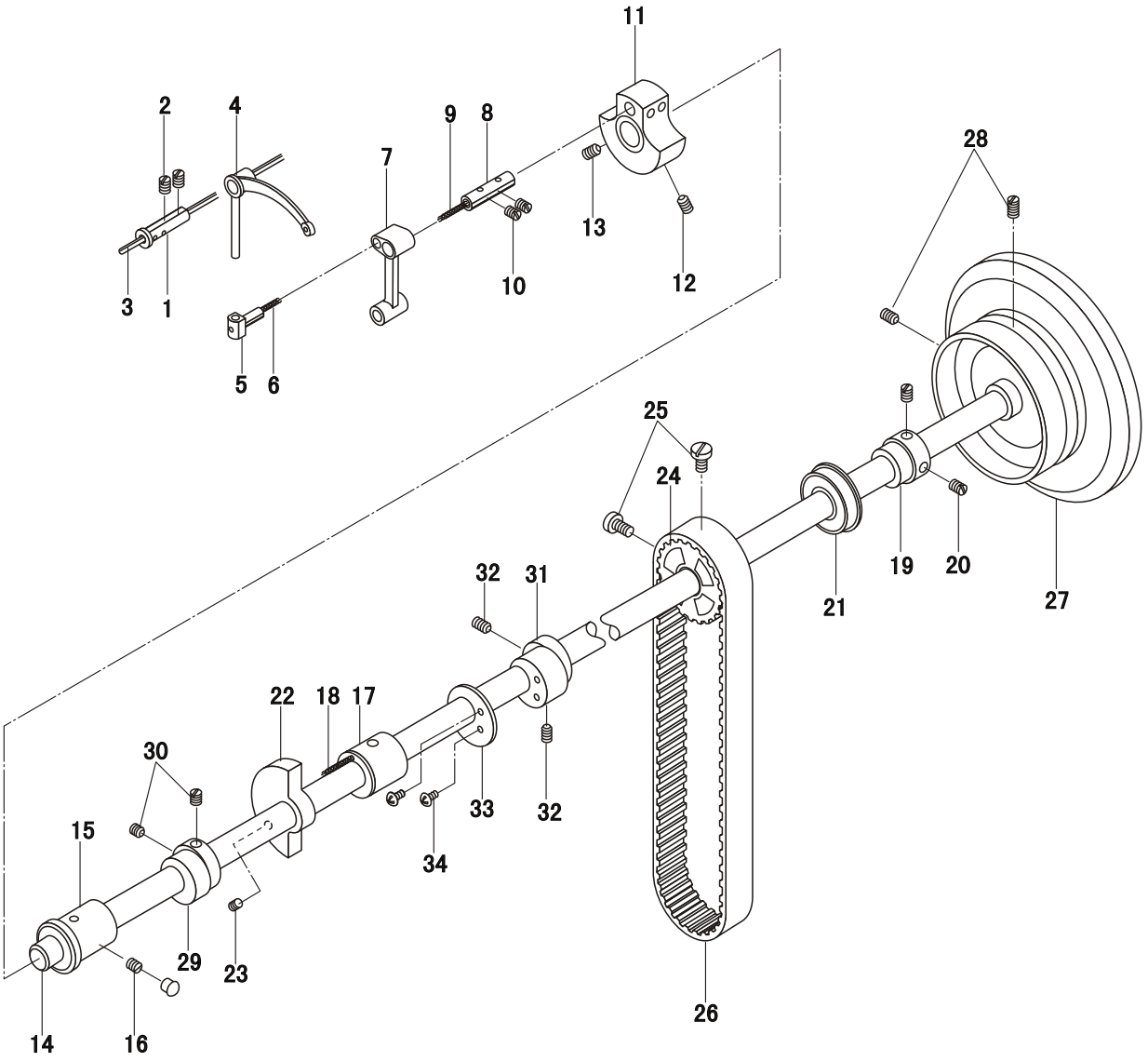
## 1. Arm and bed

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF2-001 | Arm | 1 | |
| 2 | 92WF2-002 | Bed | 1 | |
| 3 | 92WF2-003 | Face plate assembly | 1 | |
| 4 | 1WF5-039 | Screw (1) | 2 | SM11/64″×40 |
| 5 | 37T2-210 | Screw (2) | 1 | SM15/64″×28 |
| 6 | 92WF2-004 | Safety guard | 1 | |
| 7 | 13WF2-045 | Screw | 1 | SM15/64″×28 |
| 8 | 92WF2-005 | Side cover (1) | 1 | |
| 9 | 92WF2-006 | Seal spacer | 1 | |
| 10 | 1WF1-011 | Screw | 5 | SM11/64″×40 |
| 11 | 92WF2-007 | Side cover (2) | 1 | |
| 12 | 92WF2-008 | Screw | 1 | SM11/64×40 |
| 13 | 92WF2-009 | Top cover | 1 | |
| 14 | 1WF1-011 | Screw | 6 | SM11/64″×40 |
| 15 | 92WF2-010 | Rubber plug | 1 | |
| 16 | 92WF2-011 | Small cover | 1 | |
| 17 | 1WF1-011 | Screw | 1 | SM11/64″×40 |
| 18 | 92WF2-012 | Upper thread guide plate | 1 | |
| 19 | 36WF5-003 | Screw | 2 | SM3/16″×32 |
| 20 | 92WF2-013 | Upper thread guide | 1 | |
| 21 | 36WF1-016 | Screw | 1 | SM9/64″×40 |
| 22 | 92WF2-014 | Middle thread guide | 1 | |
| 23 | 1WF1-007 | Screw | 2 | SM9/64″×40 |
| 24 | 92WF2-015 | Lower thread guide assembly | 1 | |
| 25 | 1WF1-007 | Screw | 1 | SM9/64″×40 |
| 26 | 50WF2-022 | Position plate | 1 | |
| 27 | 1WF1-026 | Screw | 1 | SM9/64″×40 |
| 28 | 92WF2-016 | Needle plate | 1 | |
| 29 | 36WF3-004 | Screw | 2 | SM11/64″×40 |
| 30 | 008035C | Slide plate | 1 | |
| 31 | 92WF2-017 | Clamp holder | 1 | |
| 32 | 36T5-008E5 | Screw | 2 | SM11/64″×40 |
| 33 | 92WF2-022 | Oil screen | 1 | |
| 34 | 92WF2-023 | Presser plate | 1 | |
| 35 | 92WF2-024 | Seal spacer | 1 | |
| 36 | 22T6-008D3 | Screw | 6 | SM11/64×40 |
| 37 | 92WF2-028 | Rubber plug | 3 | |
| 38 | 92WF2-028 | Rubber plug | 1 | |
| 39 | 92WF2-028 | Rubber plug | 1 | |
| 40 | 92WF2-028 | Rubber plug | 1 | |
| 41 | 92WF2-029 | Rubber plug | 2 | |
| 42 | 92WF2-030 | Rubber plug | 1 | |
| 43 | 92WF2-031 | Rubber plug | 1 | |
| 44 | 92WF2-032 | Rubber plug | 1 | |
| 45 | 92WF2-033 | Trade mark (in Chinese) | 1 | |
| | 92WF2-034 | Trade mark (in English) | 1 | |
| 46 | 92WF2-040 | Rivet | 2 | GB827-86 |
| 47 | 1KT1-005 | Safety caution | 1 | |
| 48 | 59WF1-010 | Safety caution | 1 | |
| 49 | 21WF4-050 | Ground wire mark | 1 | |
| 50 | 92WF2-037 | Upper thread guide bar | 1 | |

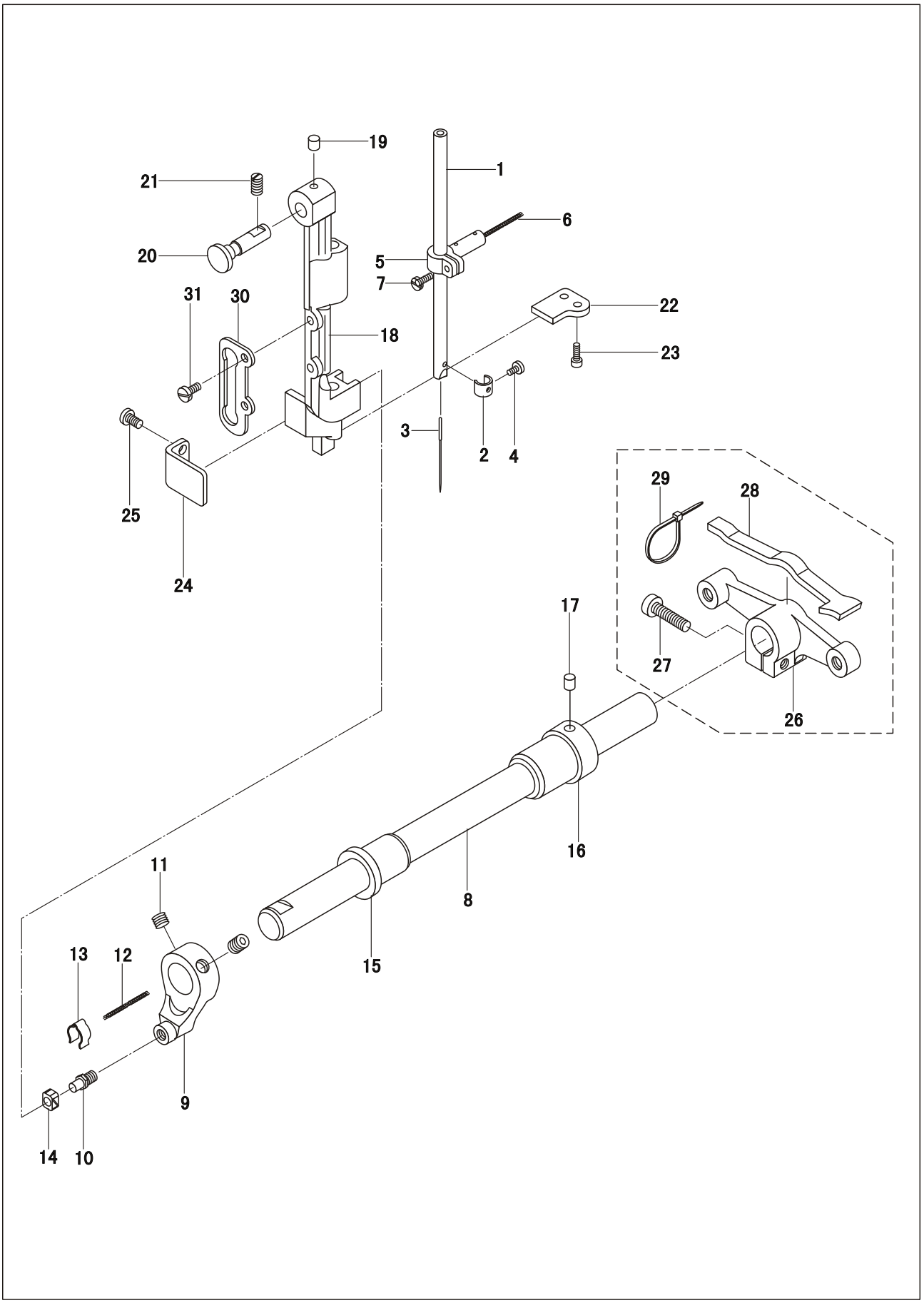
## 2.Upper shaft and thread take-up mechanism



## 2.Upper shaft and thread take-up mechanism

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 16WF1-010 | Thread take-up lever pin shaft | 1 | 103530 |
| 2 | 1WF5-019 | Screw | 2 | SM15/64″×28 |
| 3 | | Oil wick | 1 | Φ2.5×155 |
| 4 | 92WF1-004 | Thread take-up lever | 1 | |
| 5 | 92WF1-005 | Slide block | 1 | |
| 6 | | Oil wick | 1 | |
| 7 | 92WF1-006 | Needle bar link | 1 | |
| 8 | 50WF1-008 | Needle bar crank pin | 1 | |
| 9 | | Oil wick | 1 | |
| 10 | 1WF5-019 | Screw | 2 | SM15/64″×28 |
| 11 | 92WF1-007 | Needle bar crank | 1 | |
| 12 | 17050 | Scrwe | 1 | SM9/32″×28 |
| 13 | 50WF1-013 | Screw | 1 | SM9/32″×28 |
| 14 | 92WF1-008 | Upper shaft | 1 | |
| 15 | 92WF1-009 | Upper shaft front bushing | 1 | |
| 16 | 50WF1-022 | Screw | 1 | SM15/64″×28 |
| 17 | 92WF1-010 | Upper shaft middle bushing | 1 | |
| 18 | | Oil wick | 1 | Φ2×120 |
| 19 | 92WF1-011 | Bearing bushing | 1 | |
| 20 | 57WF-009 | Screw | 2 | M6 |
| 21 | 92WF1-033 | Upper bearing | 1 | 6005-2ZNR |
| 22 | 92WF1-012 | Balance block | 1 | |
| 23 | 50WF1-004 | Screw | 2 | SM15/64″×28 |
| 24 | 92WF1-013 | Synchronic wheel assembly | 1 | |
| 25 | 92WF1-014 | Screw | 2 | SM1/4″×40 |
| 26 | 92WF1-034 | Sychronic belt | 1 | 540-8YU-15 |
| 27 | 92WF1-015 | Balance wheel | 1 | |
| 28 | 1WF5-019 | Screw | 2 | SM15/64″×28 |
| 29 | 92WF3-014 | Lift eccentric wheel | 1 | |
| 30 | 49WF1-015 | Screw | 2 | SM1/4″×40 |
| 31 | 92WF3-029 | Feed eccentric wheel | 1 | |
| 32 | 49WF1-015 | Screw | 2 | SM1/4″×40 |
| 33 | 92WF3-030 | Retaining block | 1 | |
| 34 | 7WF5-017 | Screw | 2 | SM11/64″×40 |

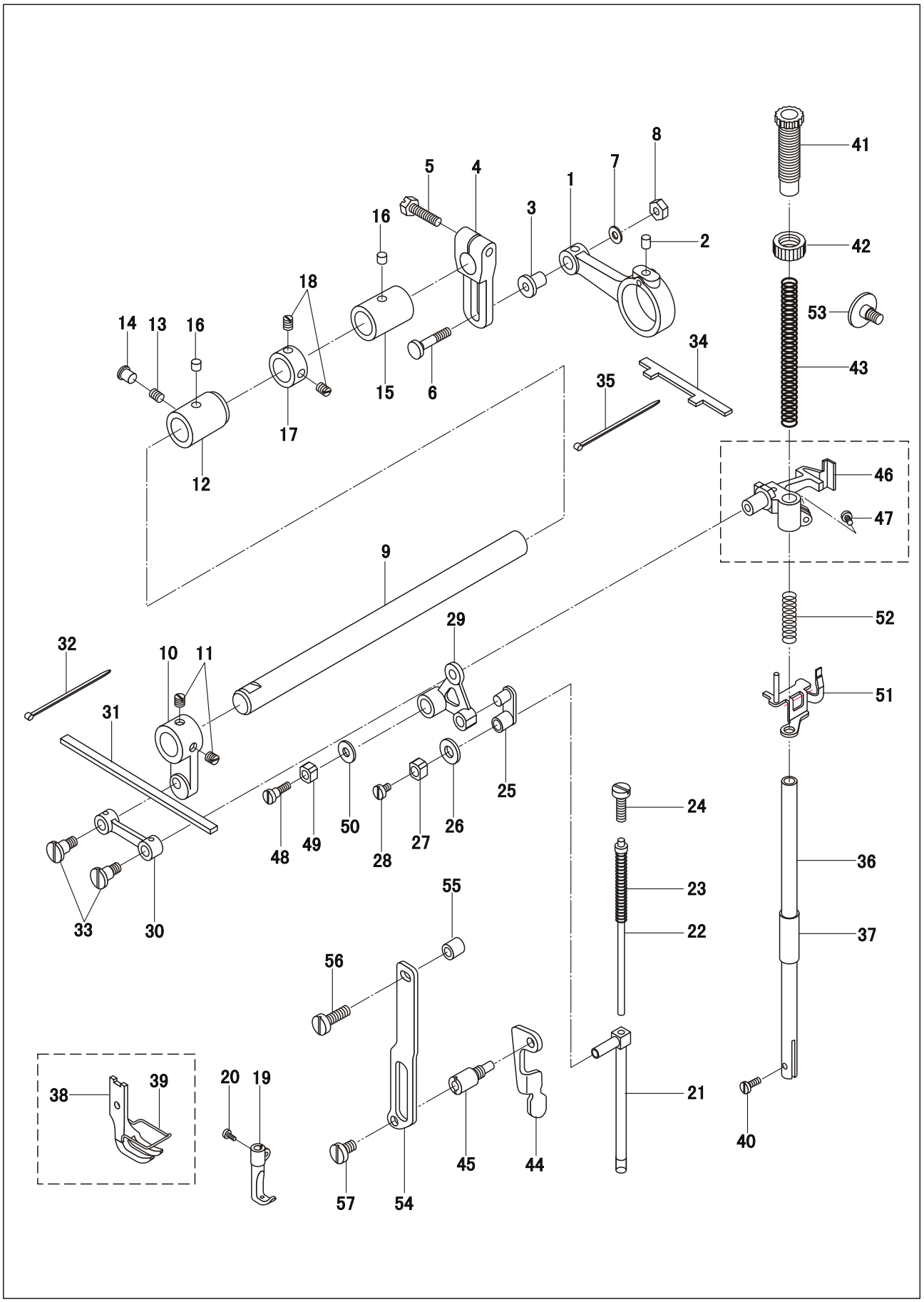
## 3.Needle bar vibrating parts



### 3.Needle bar vibrating parts

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 50WF1-001 | Needle bar | 1 | |
| 2 | 92WF1-003 | Needle bar thread guide | 1 | |
| 3 | 92WF1-032 | Needle | 1 | |
| 4 | 22T2-017 | Screw | 1 | SM1/8″×44 |
| 5 | 50WF1-003 | Needle bar adapter | 1 | |
| 6 | | Oil wick | 1 | |
| 7 | 22WF3-014 | Screw | 1 | SM9/64″×40 |
| 8 | 92WF3-001 | Vibrating shaft | 1 | |
| 9 | 92WF3-002A | Crank | 1 | |
| 10 | 92WF3-002B | Crank pin | 1 | |
| 11 | 92WF3-070 | Screw | 2 | GB80-85 M8×8 |
| 12 | | Oil felt | 1 | Φ1.5 Length 20 |
| 13 | 92WF3-003 | Spring | 1 | |
| 14 | 92WF3-004 | Slide block | 1 | |
| 15 | 92WF3-005 | Vibrating shaft front bushing | 1 | |
| 16 | 92WF3-006 | Vibrating shaft rear bushing | 1 | |
| 17 | 92WF3-007 | Oil felt | 1 | |
| 18 | 92WF3-008 | Needle bar vibrating bracket | 1 | |
| 19 | 92WF3-007 | Oil felt | 1 | |
| 20 | 92WF3-009 | Hinge shaft | 1 | |
| 21 | 1WF2-019 | Screw | 1 | SM15/64″×28 |
| 22 | 92WF3-010 | Position plate (1) | 1 | |
| 23 | 21WF1-054 | Screw | 2 | SM9/64″×40 |
| 24 | 92WF3-011 | Position plate (2) | 1 | |
| 25 | 1WF1-011 | Screw | 2 | SM11/64″×40 |
| 26 | 92WF3-012 | Driven crank | 1 | |
| 27 | 52WF1-050 | Screw | 1 | SM15/64″×28 |
| 28 | 92WF3-013 | Oil felt | 1 | |
| 29 | 2KT-001a | Wire | 2 | |
| 30 | 50WF3-030 | Guide rail | 1 | |
| 31 | 1WF1-011 | Screw | 2 | SM11/64″×40 |

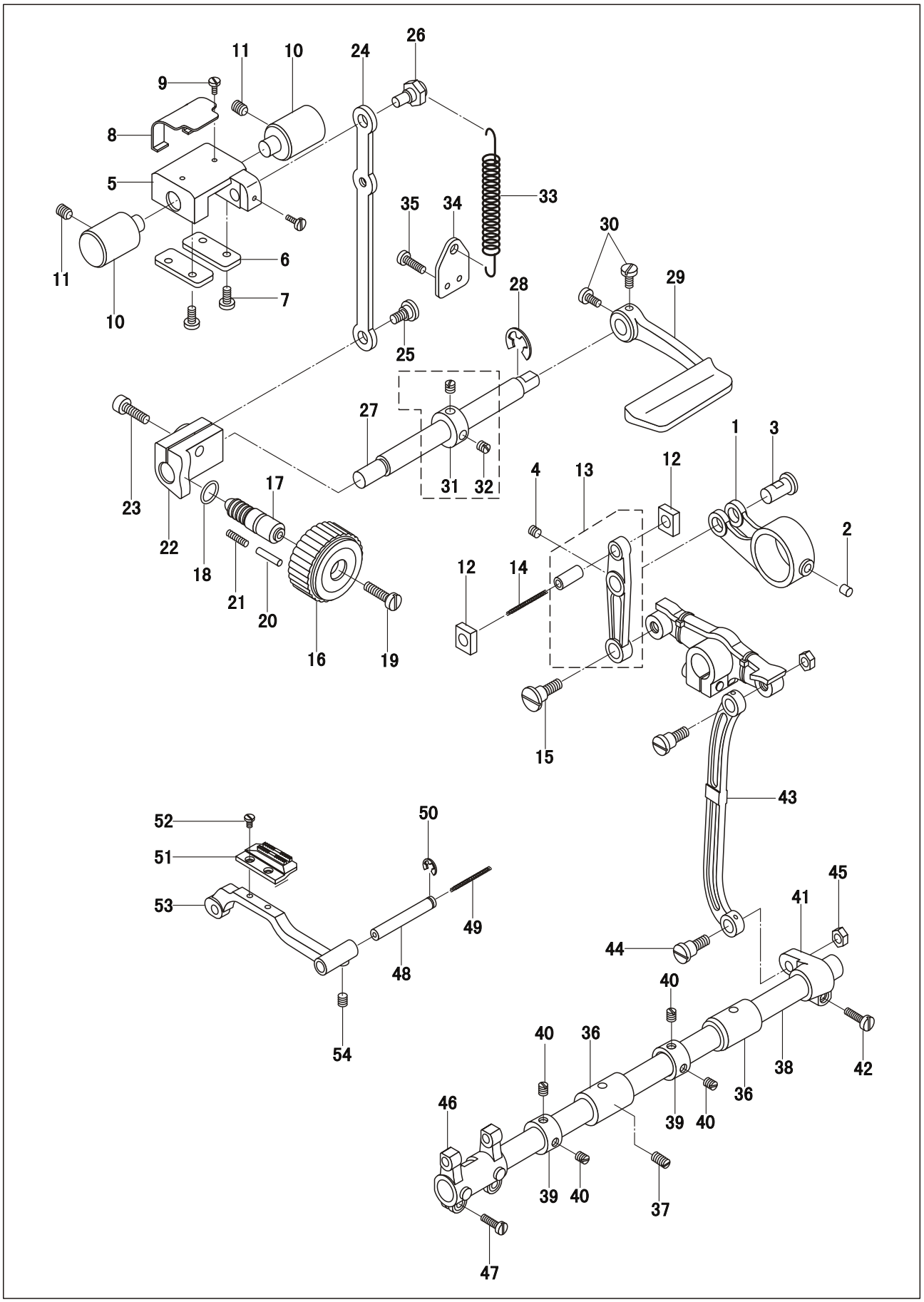
## 4.Upper feed parts



## 4.Upper feed parts

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF3-015 | Connecting bar | 1 | |
| 2 | 92WF3-007 | Oil felt | 1 | |
| 3 | 50WF3-037 | Connecting pin | 1 | |
| 4 | 92WF3-016 | Adjusting crank | 1 | |
| 5 | 92WF3-017 | Screw | 1 | GB5781-86 M6×22 |
| 6 | 50WF3-040 | Screw | 1 | SM11/64″×40 |
| 7 | 50WF3-041 | Washer | 1 | |
| 8 | 50WF3-042 | Nut | 1 | SM11/64″×40 |
| 9 | 92WF3-018 | Lifting shaft | 1 | |
| 10 | 92WF3-019 | Lifting shaft crank | 1 | |
| 11 | 2KT5-027 | Screw | 2 | SM1/4″×40 |
| 12 | 92WF3-020 | Lifting shaft front bushing | 1 | |
| 13 | 50WF1-022 | Screw | 1 | SM15/64″×28 |
| 14 | 92WF2-029 | Rubber plug | 1 | |
| 15 | 92WF3-021 | Lifting shaft rear bushing | 1 | |
| 16 | | Oil wick | 2 | Φ6×10 |
| 17 | 92WF3-022 | Collar | 1 | |
| 18 | 7WF5-033 | Screw | 2 | SM1/4″×40 |
| 19 | 92WF3-023 | Walking presser foot | 1 | |
| 20 | 50WF3-020 | Screw | 1 | SM11/64″×40 |
| 21 | 50WF3-018 | Walking presser foot lifting bar | 1 | |
| 22 | 92WF3-024 | Spring guide assembly | 1 | |
| 23 | 50WF3-032 | Spring | 1 | |
| 24 | 6K1-048 | Screw | 1 | SM15/64″×28 |
| 25 | 50WF3-027 | Walking presser foot lifting link | 1 | |
| 26 | 50WF3-028 | Oil felt | 1 | |
| 27 | 50WF3-029 | Slide block | 1 | |
| 28 | 17078 | Screw | 1 | SM11/64″×40 |
| 29 | 92WF3-025 | Presser foot lifting vibrating plate | 1 | |
| 30 | 92WF3-026 | Presser foot vibrating link | 1 | |
| 31 | 92WF3-027 | Oil felt | 1 | |
| 32 | 2KT7-001a | Wire | 2 | |
| 33 | 92WF3-028 | Screw | 2 | |
| 34 | 92WF3-069 | Oil felt | 1 | |
| 35 | 2KT7-001a | Wire | 1 | |
| 36 | 22WF3-005 | Presser bar | 1 | |
| 37 | 50WF4-001 | Presser bar shaft bushing | 1 | |
| 38 | 92WF4-001 | Presser foot | 1 | |
| 39 | 92WF4-002 | Retaining ring | 1 | |
| 40 | 22WF3-014 | Screw | 1 | SM9/64″×40 |
| 41 | 92WF4-003 | Screw | 1 | SM1/2″×28 |
| 42 | 1KT4-002 | Nut | 1 | SM1/2″×28 |
| 43 | 50WF4-006 | Spring | 1 | |
| 44 | 92WF4-004 | Feed dog lift lever | 1 | |
| 45 | 92WF4-005 | Feed dog lift lever shaft | 1 | |
| 46 | 92WF4-006 | Guide bracket | 1 | |
| 47 | 1WF1-011 | Screw | 1 | SM11/64″×40 |
| 48 | 92WF4-007 | Screw | 1 | |
| 49 | 50WF3-029 | Slide block | 1 | |
| 50 | 92WF4-008 | Spacer | 1 | |
| 51 | 92WF4-009 | Thread releasing plate | 1 | |
| 52 | 50WF4-013 | Spring | 1 | |
| 53 | 50WF4-014 | Screw | 1 | SM1/4″×28 |

## 5.Feed parts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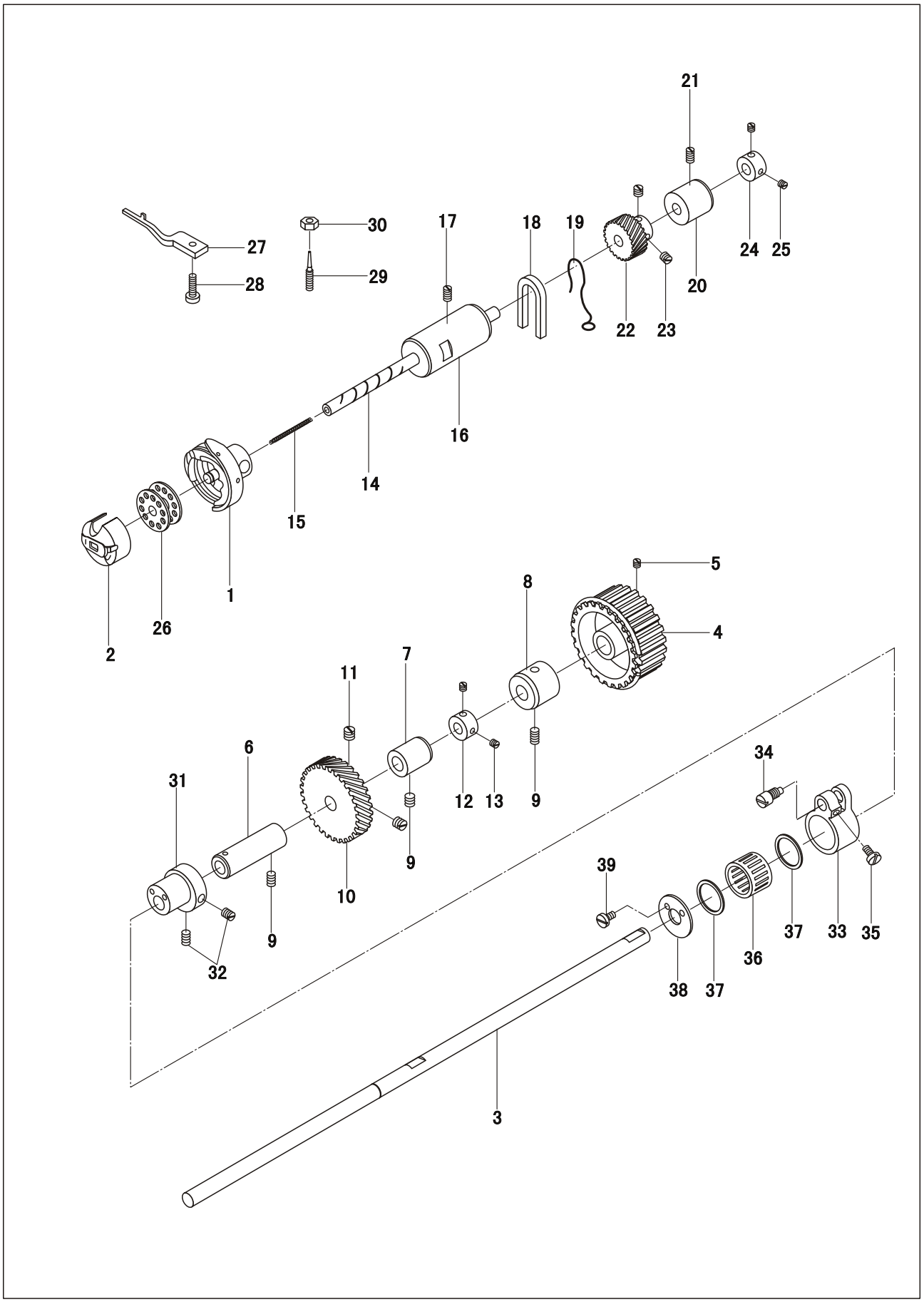
## 5.Feed parts

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF3-031 | Feed link | 1 | |
| 2 | 92WF3-032 | Oil felt | 1 | |
| 3 | 92WF3-033 | Link pin | 1 | |
| 4 | 6K2-043 | Screw | 1 | M5 |
| 5 | 92WF3-034 | Reverse feed table | 1 | |
| 6 | 92WF3-035 | Retaining plate | 2 | |
| 7 | 1WF1-011 | Screw | 4 | SM11/64″×40 |
| 8 | 92WF3-036 | Presser plate | 1 | |
| 9 | 16WF1-059 | Screw | 2 | SM11/64″×40 |
| 10 | 92WF3-037 | Reverse feed table shaft | 2 | |
| 11 | 1WF5-019 | Screw | 2 | SM15/64″×28 |
| 12 | 92WF3-038 | Slide block | 2 | |
| 13 | 92WF3-039 | Feed vibrating bar assembly | 1 | |
| 14 | | Oil wick | 1 | Φ1.5 Length 35 |
| 15 | 92WF3-040 | Screw | 1 | |
| 16 | 92WF3-041 | Stitch length adjusting button | 1 | |
| 17 | 92WF3-042 | Bolt | 1 | |
| 18 | 92WF3-043 | Seal ring | 1 | |
| 19 | 92WF3-044 | Screw | 1 | SM3/16″×28 |
| 20 | 17WF4-035 | Stop pin | 1 | |
| 21 | 50WF3-058 | Spring | 1 | |
| 22 | 92WF3-045 | Stitch length holder | 1 | |
| 23 | 6K2-024 | Screw | 1 | M6 |
| 24 | 92WF3-046 | Link | 1 | |
| 25 | 92WF3-047 | Screw | 1 | |
| 26 | 92WF3-048 | Eccentric pin | 1 | |
| 27 | 92WF3-049 | Reverse feed lever shaft | 1 | |
| 28 | 92WF3-071 | Retainer | 1 | GB896-86-9 |
| 29 | 92WF3-050 | Reverse feed lever | 1 | |
| 30 | 92WF3-051 | Screw | 2 | SM3/16″×28 |
| 31 | 92WF3-052 | Collar | 1 | |
| 32 | 7WF5-033 | Screw | 2 | SM1/4″×40 |
| 33 | 92WF3-053 | Spring | 1 | |
| 34 | 92WF3-054 | Spring hook | 1 | |
| 35 | 1WF3-009 | Screw | 2 | SM11/64″×40 |
| 36 | 92WF3-021 | Feed shaft bushing | 2 | |
| 37 | 1WF2-019 | Screw | 1 | SM15/64″×28 |
| 38 | 92WF3-055 | Feed shaft | 1 | |
| 39 | 92WF3-022 | Collar | 2 | |
| 40 | 7WF5-033 | Screw | 4 | SM1/4″×40 |
| 41 | 92WF3-057 | Crank | 1 | |
| 42 | 41WF3-018 | Screw | 1 | SM3/16″×28 |
| 43 | 92WF3-058 | Link | 1 | |
| 44 | 92WF3-059 | Screw | 2 | |
| 45 | 6KT2-053 | Nut | 2 | SM9/32″×28 |
| 46 | 92WF3-060 | Feed crank | 1 | |
| 47 | 1WF3-009 | Screw | 2 | SM11/64″×40 |
| 48 | 92WF3-061 | Connecting pin | 1 | |
| 49 | | Oil wick | 1 | Φ3 Length 50 |
| 50 | 92WF3-072 | Retainer | 1 | GB896-86-5 |
| 51 | 92WF3-067 | Feed dog | 1 | |
| 52 | 17WF3-002 | Screw | 2 | SM1/8″×44 |
| 53 | 92WF3-068 | Feed dog support | 1 | |
| 54 | 80WF6-036 | Screw | 1 | M5 |

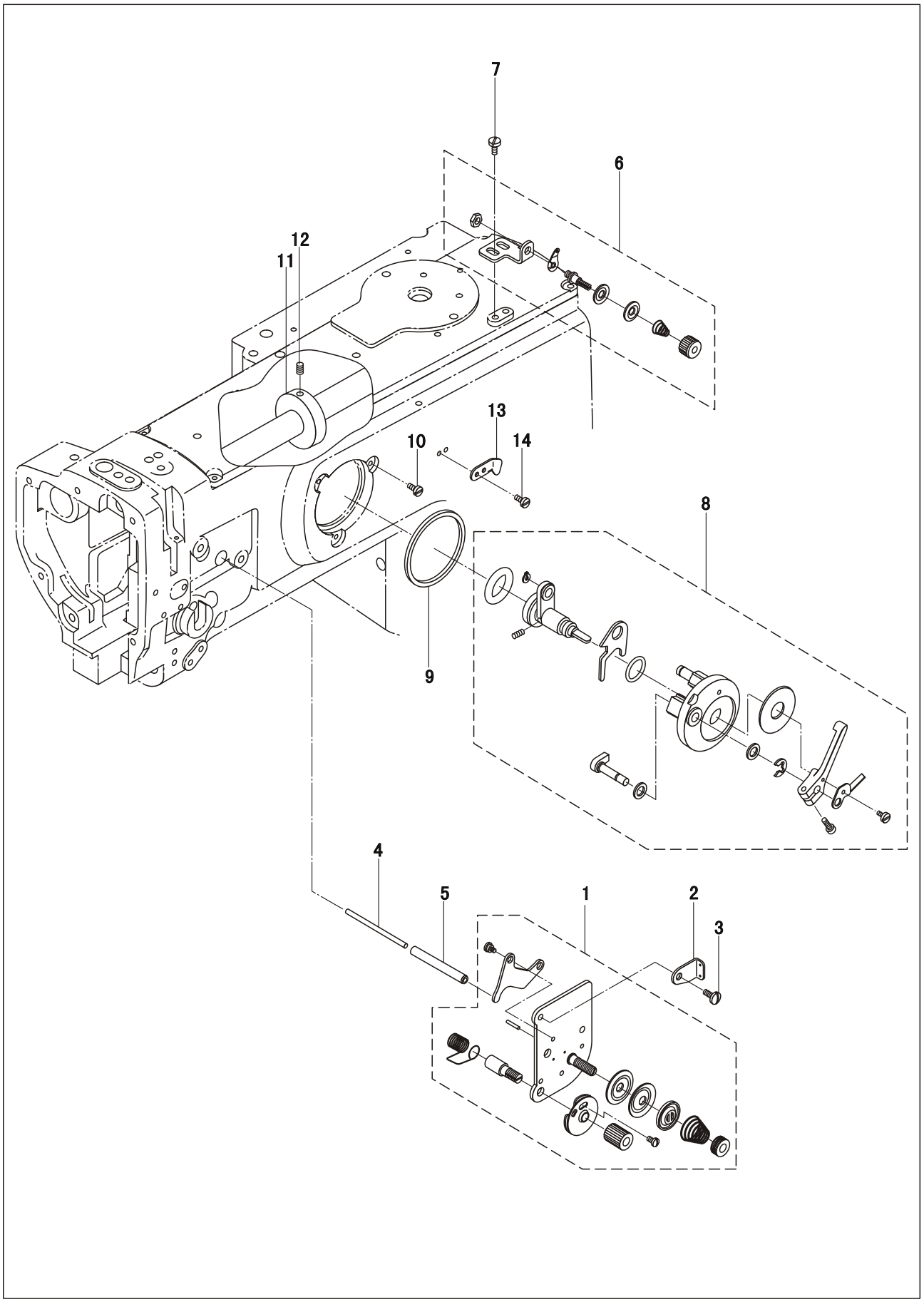
## 6.Lower shaft and rotating hook shaft



## 6.Lower shaft and rotating hook shaft

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF1-001 | Rotating hook | 1 | |
| 2 | 92WF1-002 | Bobbin case body | 1 | |
| 3 | 92WF1-016 | Lower shaft | 1 | |
| 4 | 92WF1-017 | Lower shaft synchronic wheel assembly | 1 | |
| 5 | 92WF1-014 | Screw | 2 | SM1/4″×40 |
| 6 | 92WF1-018 | Lower shaft front bushing | 1 | |
| 7 | 92WF1-019 | Lower shaft middle bushing | 1 | |
| 8 | 92WF1-020 | Lower shaft rear bushing | 1 | |
| 9 | 17T5-016 | Screw | 3 | SM15/64″×28 |
| 10 | 92WF1-021 | Lower shaft gear | 1 | |
| 11 | 2KT5-027 | Screw | 2 | SM1/4″×40 |
| 12 | 92WF1-022 | Collar | 1 | |
| 13 | 36WF5-012A | Screw | 2 | SM11/16″×40 |
| 14 | 92WF1-023 | Rotating hook shaft | 1 | |
| 15 | | Oil wick | 1 | |
| 16 | 92WF1-024 | Rotating hook front bushing | 1 | |
| 17 | 1WF5-019 | Screw | 1 | SM15/64″×28 |
| 18 | 92WF1-025 | Oil felt | 1 | |
| 19 | 92WF1-026 | Spring | 1 | |
| 20 | 92WF1-027 | Rotating hook rear bushing | 1 | |
| 21 | 1WF5-019 | Scrwe | 1 | SM15/64″×28 |
| 22 | 92WF1-028 | Rotating hook gear | 1 | |
| 23 | 7WF5-033 | Screw | 2 | SM1/4″×40 |
| 24 | 92WF1-029 | Collar | 1 | |
| 25 | 18WF3-022 | Screw | 2 | SM11/64″×40 |
| 26 | 33T1-027 | Bobbin | 1 | |
| 27 | 17WF3-014 | Position hook | 1 | |
| 28 | 6K1-057 | Screw | 1 | SM11/64″×40 |
| 29 | 92WF1-031 | Screw | 1 | SM11/64″×40 |
| 30 | 50WF3-042 | Nut | 1 | SM11/64″×40 |
| 31 | 92WF3-062 | Eccentric wheel | 1 | |
| 32 | 6K1-017 | Screw | 2 | SM15/64″×28 |
| 33 | 92WF3-063 | Feed dog lift link | 1 | |
| 34 | 92WF3-064 | Eccentric pin | 1 | |
| 35 | 2KT5-005 | Screw | 1 | SM11/64″×40 |
| 36 | 92WF3-073 | Bearing | 1 | K202417 |
| 37 | 92WF3-065 | Retainer | 2 | |
| 38 | 92WF3-066 | Cover | 1 | |
| 39 | 16WF1-059 | Screw | 2 | SM9/64″×40 |

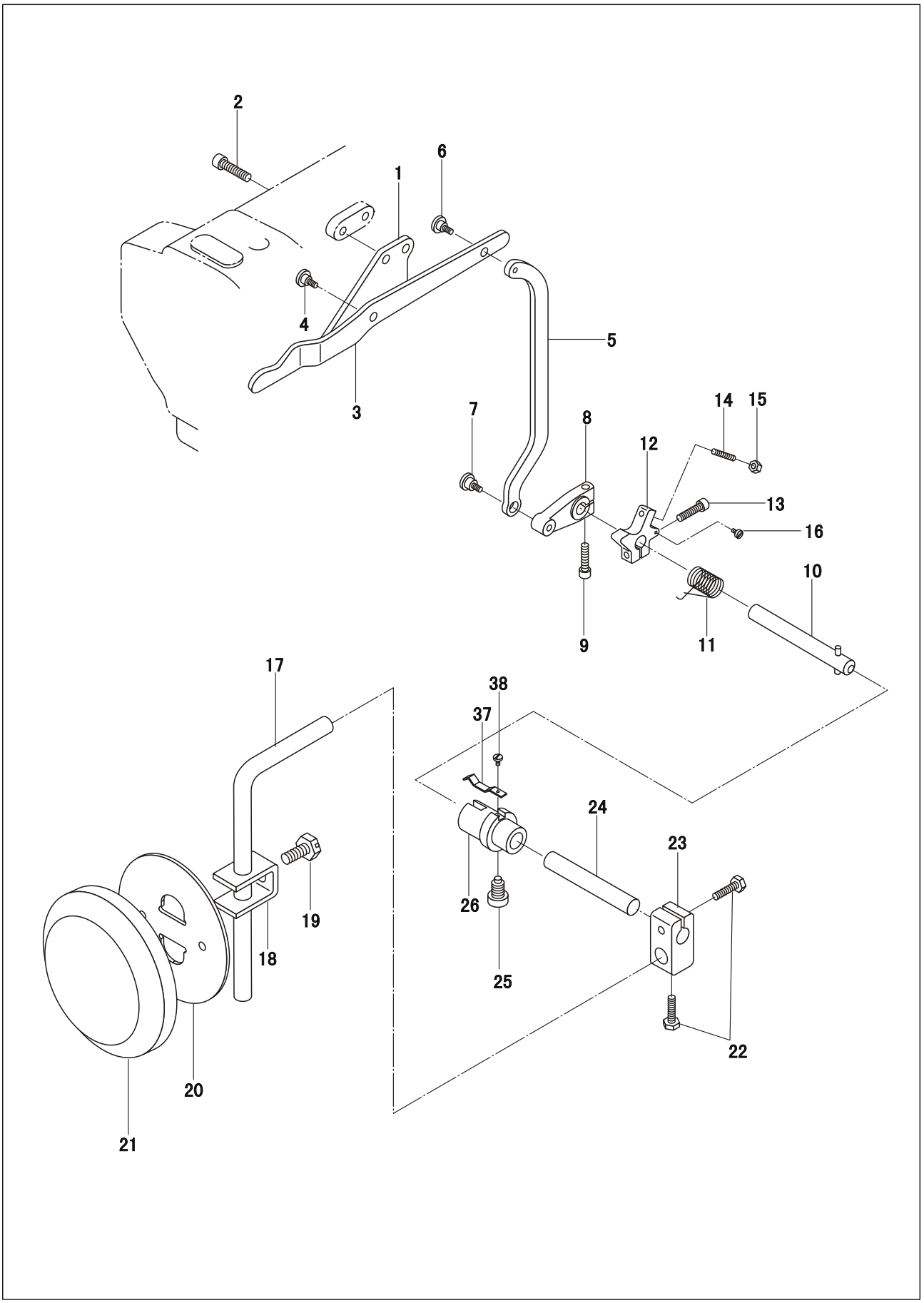
## 7.Thread tension and winding parts



## 7.Thread tension and winding parts

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF2-018 | Thread tension plate assembly | 1 | |
| 2 | 92WF2-019 | Thread guide plate | 1 | |
| 3 | 1WF1-011 | Screw | 2 | SM11/64″×40 |
| 4 | 92WF2-020 | Thread releasing bar | 1 | |
| 5 | 92WF2-036 | Thread releasing bar bushing | 1 | GB879-86 6×55 |
| 6 | 92WF2-021 | Thread tension disc assembly | 1 | |
| 7 | 13WF2-040 | Screw | 1 | M4 |
| 8 | 92WF2-025 | Winder assembly | 1 | |
| 9 | 92WF2-026 | Washer | 1 | |
| 10 | 92WF2-027 | Screw | 3 | SM11/64″×40 |
| 11 | 92WF2-035 | Friction wheel | 1 | |
| 12 | 6K2-043 | Screw | 2 | |
| 13 | 92WF2-036 | Trimming blade | 1 | |
| 14 | 36WF2-031 | Screw | 2 | |

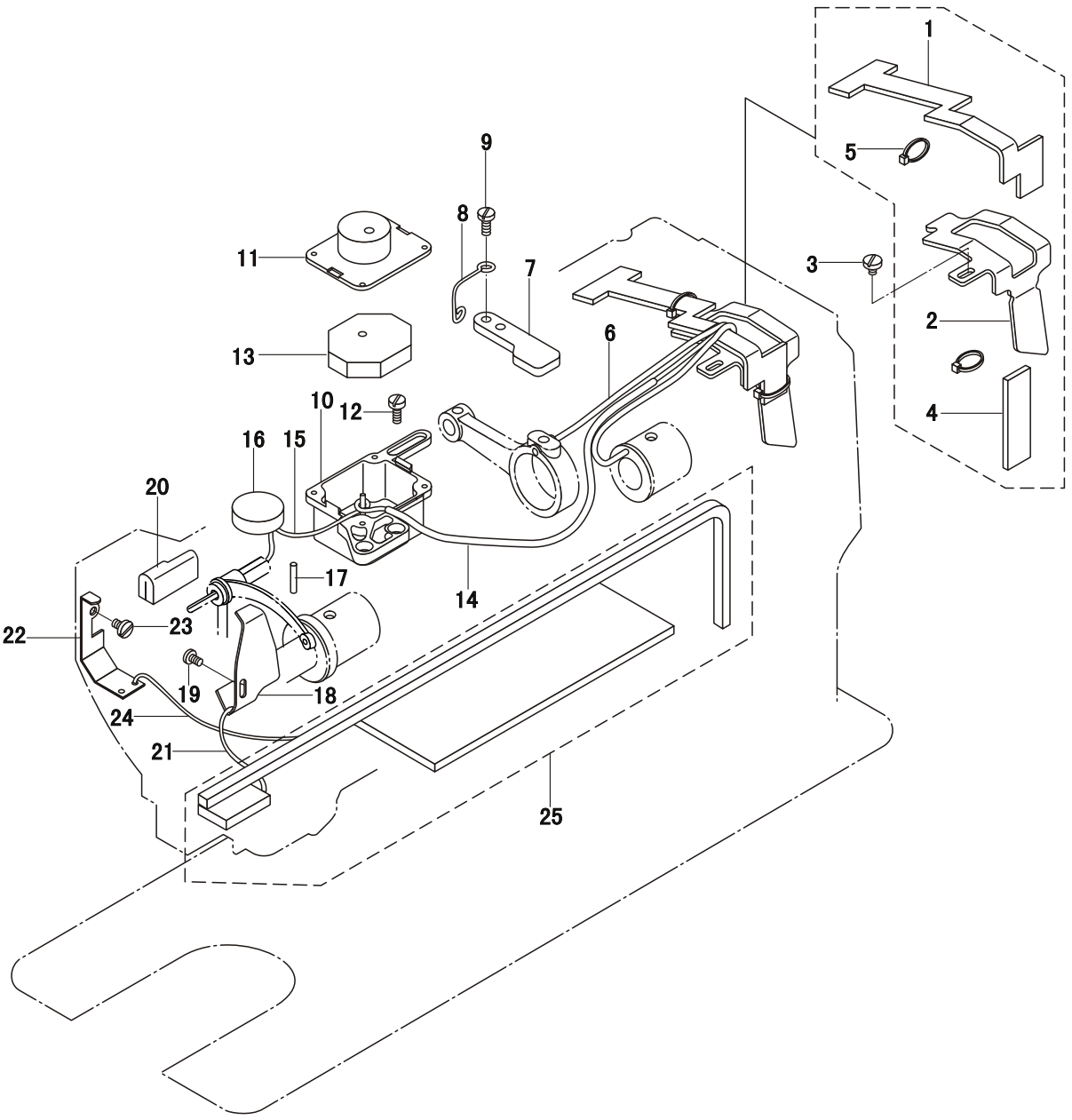
## 8.Knee control parts



## 8.Knee control parts

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF4-012 | Knee control lever support | 1 | |
| 2 | 6K2-024 | Screw | 2 | M6 |
| 3 | 92WF4-013 | Knee control lever | 1 | |
| 4 | 92WF4-014 | Screw | 1 | SM1/4″×40 |
| 5 | 92WF4-015 | Knee control connecting rod | 1 | |
| 6 | 92WF4-016 | Screw | 1 | SM11/64″×40 |
| 7 | 92WF4-014 | Screw | 1 | SM1/4″×40 |
| 8 | 94WF4-017 | Crank | 1 | |
| 9 | 80WF6-025 | Screw | 1 | M5 |
| 10 | 92WF4-018 | Knee control revolving shaft | 1 | |
| 11 | 92WF4-019 | Spring | 1 | |
| 12 | 92WF4-020 | Position block | 1 | |
| 13 | 80WF6-025 | Screw | 1 | M5 |
| 14 | 92WF4-022 | Screw | 1 | GB77-85 M5×25 |
| 15 | 13WF3-074 | Nut | 1 | M5 |
| 16 | 92WF4-021 | Screw | 1 | SM9/64″×40 |
| 17 | 22T9-003B2 | Knee control bell bent bar | 1 | |
| 18 | 22T9-003B6 | Bell bracket | 1 | |
| 19 | 22T9-003B7 | Screw | 1 | |
| 20 | 22T9-003B5 | Knee control bell | 1 | |
| 21 | 22T9-003B8 | Cushion | 1 | |
| 22 | 60WF6-007 | Screw | 2 | SM5/16″×24 |
| 23 | 60WF6-008 | Bell bent bar adapter | 1 | |
| 24 | 60WF6-009 | Knee control connecting bar | 1 | |
| 25 | 17WF2-026B | Screw | 1 | SM5/16″×24 |
| 26 | 60WF6-010 | Connecting bushing | 1 | |
| 27 | 60WF6-011 | Spring | 1 | |
| 28 | 60WF1-002 | Screw | 1 | SM9/64″×40 |

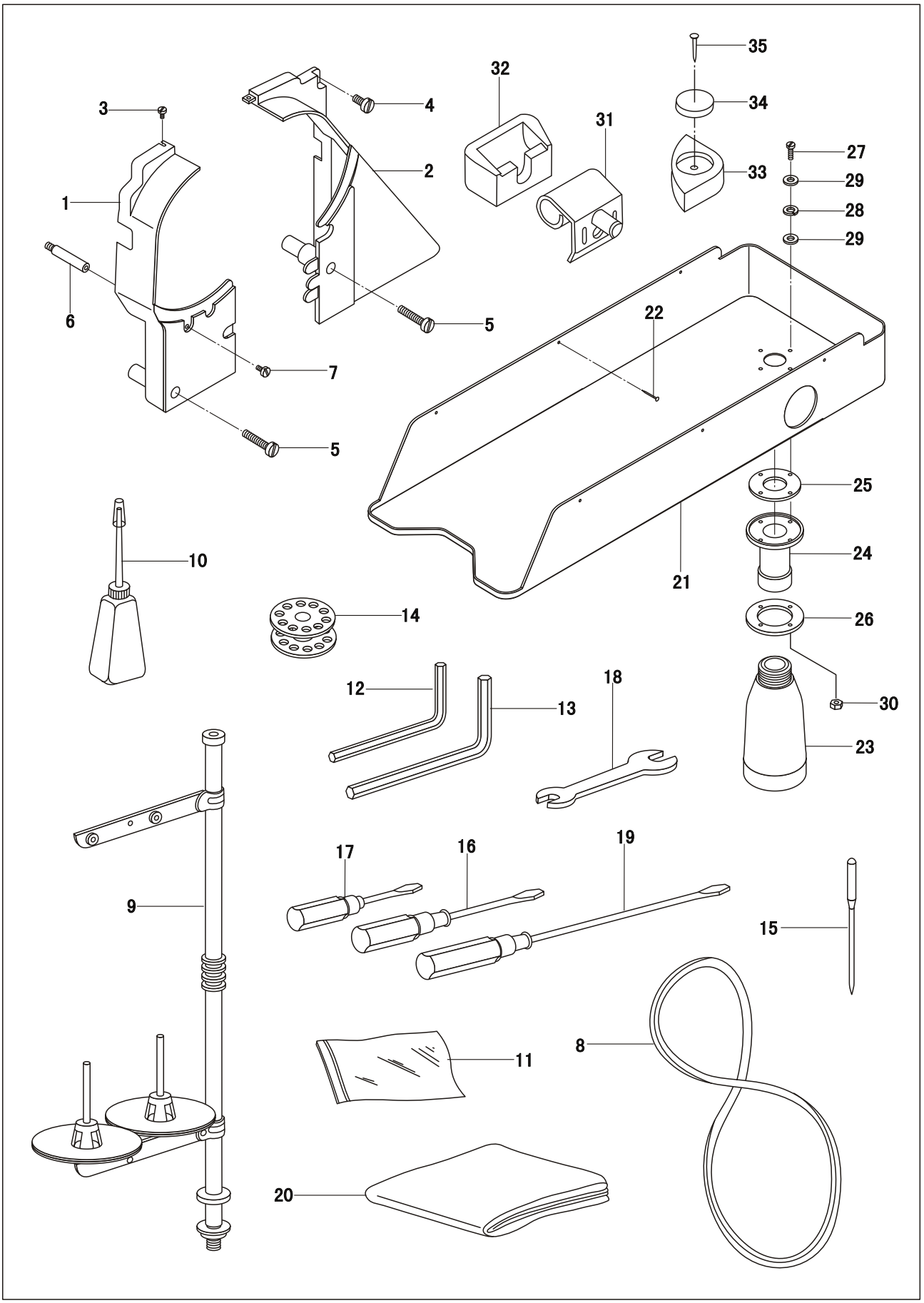
## 9.Lubrication



## 9.Lubrication

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF5-001 | Oil felt | 1 | |
| 2 | 92WF5-002 | Oil felt support | 1 | |
| 3 | 36WF1-031D | Screw | 1 | SM11/64″×40 |
| 4 | 92WF5-003 | Small oil felt | 1 | |
| 5 | 2KT7-001a | Wire | 3 | |
| 6 | | Oil wick | 1 | Φ2×190 |
| 7 | 92WF5-004 | Presser plate | 1 | |
| 8 | 92WF5-005 | Thread Hook | 1 | |
| 9 | 42WF2-008 | Screw | 2 | SM11/64″×40 |
| 10 | 92WF5-006 | Oil pot | 1 | |
| 11 | 92WF5-007 | Oil pot cover | 1 | |
| 12 | 21WF3-026 | Screw | 2 | SM11/64″×40 |
| 13 | 92WF5-008 | Oil felt | 2 | |
| 14 | | Oil tube | 1 | Φ3× Φ5×180 |
| 15 | | Oil wick | 1 | Φ2×380 |
| 16 | 92WF5-009 | Oil felt 1 | 1 | |
| 17 | 92WF5-010 | Oil felt 2 | 1 | |
| 18 | 92WF5-011 | Oil retaining plate | 1 | |
| 19 | 16WF1-059 | Screw | 1 | SM9/64″×40 |
| 20 | 92WF5-012 | Oilk felt | 1 | |
| 21 | | Oil wick | 1 | Φ2×250 |
| 22 | 92WF5-013 | Oil retaining plate | 1 | |
| 23 | 36WF1-031D | Screw | 1 | SM11/64″×40 |
| 24 | | Oil wick | 1 | Φ2×250 |
| 25 | 92WF5-014 | Oil felt assembly | 1 | |

## 10.Accessories



## 10.Accessories

| NO. | Part Number | Name | Qt. | Remark |
|---|---|---|---|---|
| 1 | 92WF6-013A | Safety guard 1 | 1 | |
| 2 | 92WF6-013B | Safety guard 2 | 1 | |
| 3 | 2KT6-012 | Screw | 1 | SM11/64″×40 |
| 4 | 21WF3-012 | Screw 1 | 1 | SM15/64″×28 |
| 5 | 1WF2-060 | Screw 2 | 2 | SM15/64″×28 |
| 6 | 92WF6-016 | Column | 1 | |
| 7 | 42WF2-008 | Screw | 1 | SM11/64×40 |
| 8 | | V-belt | 1 | M42 |
| 9 | 33TF-019 | Spool stand | 1 | |
| 10 | 33TF-011 | Small oil pot | 1 | |
| 11 | 33TF-010 | Parts bag | 2 | |
| 12 | 1F-010 | Spanner | 1 | S=2.5mm |
| 13 | 1F-011 | Spanner | 1 | S=3mm |
| 14 | 33T1-027 | Bobbin | 6 | |
| 15 | | Needle | 3 | DP×17 23# |
| 16 | 33TF-013 | Screwdriver (medium) | 1 | |
| 17 | 33TF-014 | Screwdriver (small) | 1 | |
| 18 | | Double ended spanner | 1 | 9×10 |
| 19 | 33TF-012 | Screwdriver (big) | 1 | |
| 20 | 13F-002 | Machine head cover | 1 | |
| 21 | 92WF6-017 | Oil reservoir | 1 | |
| 22 | | Screw | 6 | SG1162-79 Length 22mm |
| 23 | 92WF6-027 | Oil pot | 1 | |
| 24 | 92WF6-018 | Adapter | 1 | |
| 25 | 92WF6-019 | Seal ring | 1 | |
| 26 | 92WF6-020 | Presser plate | 1 | |
| 27 | | Connecting screw | 4 | GB818-85 M3×14 |
| 28 | | Spacer | 4 | GB848-85 M3 |
| 29 | 92WF6-023 | Seal spacer | 8 | |
| 30 | | Connecting nut | 4 | GB170-86 M3 |
| 31 | 71WF5-009 | Connecting hook assembly | 2 | |
| 32 | 71WF5-010 | Rubber cushion | 2 | |
| 33 | 92WF6-025 | Rubber cushion | 4 | |
| 34 | 92WF6-026 | Oil felt | 4 | |
| 35 | 13F-006 | Screw | 4 | GB349-88 1″ |

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